

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 71-72

WASTE DISCHARGE REQUIREMENTS
FOR
CENTRAL CONTRA COSTA SANITARY DISTRICT
NEAR MARTINEZ, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, finds that:

- A. This Regional Board prescribed requirements for the waste discharged by Central Contra Costa Sanitary District, called the discharger below, in Resolution No. 70-45 on May 28, 1970.
- B. The discharges include:
 1. Waste "A" is 21 million gallons per day (mgd), Average dry weather flow (ADWF), of sewage from a present population of 275,000, mixed with industrial waste. Existing primary treatment facilities have a design population of 300,000, and design flow of 30 mgd (ADWF). The effluent is discharged via Outfall "A" into Suisun Bay at a depth of 35 feet. The Terminus of the outfall is 1,700 feet offshore; 2,500 feet west of the Avon Dock and 125 feet inshore of the edge of the deep water channel. Increasing the treatment plant primary capacity to a flow of 45 mgd (ADWF) is proposed for the near future. Subsequent expansion in stages to design population of 1,020,000 and design flow of 120 mgd (ADWF) is being considered.
 2. Waste "B" is about 12,000 gallons per day of digested sludge from the treatment plant, and 72,000 gallons per day of alum sludge from Contra Costa County Water District, and is discharged into lagoons and drying beds (Land Disposal Site L-1) lying north and east of the treatment units.
 3. Waste "C" is partially treated sewage which occasionally enters Grayson Creek at a point about 1,000 feet north of California State Highway No. 4 during heavy storms, when infiltration causes the sewage flow to exceed about 60 mgd. The outfall gravity capacity varies between 60 and about 75 mgd, depending on tidal stage. The discharger proposes to eliminate this bypassing of dilute sewage effluent by providing a holding basin that will store flow exceeding the outfall capacity for later treatment and discharge through the outfall.
- C. The Board adopted an interim water quality control plan for the San Francisco Bay Basin on June 17, 1971.
- D. The beneficial uses of the waters of Suisun Bay and contiguous water bodies are:
 1. Seasonal source of domestic water supply at Mallard Slough.
 2. Industrial cooling and process water supply.

3. Swimming, water-skiing, wading, pleasure boating, marinas, fishing and hunting.
 4. Fish, shellfish, and wildlife propagation and sustenance, and waterfowl and migratory birds habitat and resting.
 5. Navigation channels and port facilities.
 6. Esthetic enjoyment.
- E. Land within 1000 feet of the discharge points is used for industry and transportation.
- F. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for these discharges.
- G. The Board in a public meeting heard and considered all comments pertaining to these discharges.

IT IS HEREBY ORDERED, the discharger shall comply with the following:

A. Discharge Specifications

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharge shall not cause:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam in waters of the State at any place;
 - b. Bottom deposits or aquatic growths at any place;
 - c. Alteration of temperature, turbidity or apparent color beyond present natural background levels in waters of the State at any place;
 - d. Visible, floating, suspended or deposited oil or other products of petroleum origin in waters of the State at any place;
 - e. Waters of the State to exceed the following limits of quality at any place within one foot of the water surface:

pH	0.1 pH unit, maximum change from natural ambient
Dissolved oxygen	Minimum - 5.0 mg/l Annual median - 80% saturation When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.

Coliform Organisms

240 MPN/100 ml, median of five consecutive samples, maximum

10,000 MPN/100 ml, any single sample when verified by a repeat sample taken within 48 hours, maximum

Whenever either of these bacterial values is exceeded in the receiving water for any reason they shall both be met instead in the waste at some point in the treatment process.

- f. Waters of the State to exceed the following limits of quality at any point:

Dissolved sulfide

0.1 mg/l maximum

Biostimulants

None in concentrations sufficient to cause deleterious biotic growths.

Toxic or Other
Deleterious Substances

None shall be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

3. Waste as discharged to waters of the State shall meet these quality limits at all times:

- a. In any grab sample:

pH

7.0 minimum
8.5 maximum

Settleable matter

The arithmetic average of any six or more samples collected on any day

0.5 ml/l/hr., maximum

80% of all individual samples collected during maximum daily flow over any 30-day period

0.4 ml/l/hr., maximum

Any sample

1.0 ml/l/hr., maximum

b. In any representative set of samples:

Toxicity: The Regional Board proposes to adopt toxicity limits at the earliest practicable date

4. The average dry weather flow for Waste "A" for any seven (7) consecutive days, shall not exceed 45 mgd.
5. The discharge of Waste "B" shall not cause waste material to be in any position where it is, or can be carried from Land Disposal Site "L-1" and deposited into waters of the State.
6. Land Disposal Site "L-1" shall have facilities adequate to exclude flood and tidal waters, to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site. Adequate protection is defined as protection from at least a 100-year storm.

B. Discharge Prohibitions

1. If after June 1, 1976, Waste "A" contains conservative toxic and deleterious substances or biostimulatory substances, it shall be prohibited.
2. The disposal of material acceptable only at Class I waste disposal sites in Land Disposal Site "L-1".
3. The bypass of untreated wastes from the discharger's sewer system is prohibited.
4. The bypassing of Waste "C" is prohibited after April 30, 1972.

C. Provisions

1. The District shall comply with all requirements of this Order except toxicity and "Discharge Prohibitions" B.1 and B.4 forthwith.
2. This Order includes items numbered 1, 2, 4, 5, 6 and 7 of the attached "Reporting Requirements" dated August 28, 1970.
3. This Order includes items numbered 1, 2, 3, 4, 5, 6 and 7 of the attached "Notifications" dated January 6, 1970.
4. This Regional Board's Resolution No. 70-45 is hereby rescinded.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of any order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 28, 1971.

Executive Officer